

THE UNIVERSITY OF CHICAGO

To effectively utilize the reluctance torque in an embedded magnet type permanent magnet rotor to thereby decrease the leakage flux, a rotor core is formed with slits having longitudinal ends. The longitudinal ends of the slits are open to the outside in the outside circumferential surface of the rotor core. Narrow bridges are formed at longitudinal middle portions of the slits. The narrow bridges connect the radially outer portions and the radially inner portions of the rotor core. Permanent magnets are embedded in the slits. The embedded permanent magnets are magnetized in the direction of thickness of the slits.